

1 **WHAT IS CLAIMED IS:**

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3 1. A method for treating a target tissue within an intervertebral
4 disc, comprising:

5 a) forming a void in at least close proximity to the target tissue; and
6 b) delivering a preheated fluid to the void, wherein the fluid is
7 preheated to a temperature in the range of from about 45°C to 90°C, and at least a
8 portion of the target tissue undergoes contraction due to heat exchange between the
9 target tissue and the fluid.

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1 2. The method of claim 1, wherein the temperature of the target
2 tissue is increased to a treatment temperature due to the heat exchange between the
3 target tissue and the preheated fluid, wherein the treatment temperature is in the range
4 of from about 45°C to 90°C.

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1 3. The method of claim 2, wherein the treatment temperature is in
2 the range of from about 60°C to 70°C.

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1 4. The method of claim 1, wherein the target tissue comprises
2 nucleus pulposus tissue.

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1 5. The method of claim 1, wherein the target tissue lies adjacent to
2 the annulus fibrosus.

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1 6. The method of claim 1, wherein the target tissue lies adjacent to
2 an annular fissure of the disc.

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1 7. The method of claim 1, wherein said step a) comprises ablating
2 disc tissue components using an electrosurgical probe.

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1 8. The method of claim 7, further comprising:
2 c) prior to said step b), manipulating the electrosurgical probe such that
3 the void is sculpted to a suitable size and shape.

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1 9. The method of claim 7, wherein said step b) comprises
2 delivering the preheated fluid to the void via a fluid delivery unit, wherein the fluid
3 delivery unit is integral with the electrosurgical probe.

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1 10. The method of claim 7, wherein said step b) comprises
2 delivering the preheated fluid to the void via a fluid delivery system, wherein the fluid
3 delivery system is separate from the electrosurgical probe.

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1 11. The method of claim 1, wherein said step b) comprises
2 delivering saline to the void, the saline at a temperature in the range of from about
3 60°C to 70°C.

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1 12. The method of claim 1, wherein said step b) comprises
2 delivering the preheated fluid to the void at a regulated rate, and the method further
3 comprises:

4 d) withdrawing the fluid from the void, whereby the fluid is circulated
5 through the void at a substantially constant temperature.

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1 13. A method for treating an intervertebral disc, comprising:
2 a) forming a void in at least close proximity to a target tissue within the
3 intervertebral disc; and
4 b) delivering a preheated fluid to the void, wherein at least a portion of
5 the target tissue is heated to a temperature in the range of from about 45°C to 90°C,
6 whereby collagen fibers within the target tissue undergo shrinkage.

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1 14. The method of claim 13, wherein at least a portion of the target
2 tissue is heated to a temperature in the range of from about 60°C to 70°C.

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1 15. The method of claim 13, wherein the target tissue is heated via
2 heat exchange between the preheated fluid and the target tissue.

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1 16. The method of claim 13, wherein said step a) comprises
2 forming a void in the nucleus pulposus.

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1 17. The method of claim 13, wherein said step a) comprises:
2 c) positioning an active electrode terminal of an electrosurgical probe
3 within the disc at a location in at least close proximity to the target tissue; and
4 d) applying a high frequency voltage between the active electrode
5 terminal and a return electrode.

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1 18. The method of claim 17, further comprising:
2 e) during said step d), manipulating the electrosurgical probe such that
3 the void is sculpted to a suitable size and shape.

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1 19. The method of claim 17, wherein said step b) comprises
2 delivering the preheated fluid to the void via a fluid delivery system, the fluid delivery
3 system separate from the electrosurgical probe.

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1 20. An electrosurgical apparatus, comprising:
2 a shaft having a shaft distal end;
3 an electrode assembly at the shaft distal end;
4 a fluid delivery unit including a fluid delivery tube; and
5 a fluid source unit coupled to the fluid delivery tube, the fluid source unit
6 providing a fluid at a controlled temperature to the fluid delivery unit, wherein the fluid
7 source unit includes a fluid reservoir and a temperature control unit coupled to the fluid
8 reservoir.